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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/692,823 | 10/27/2003 | Tatsuya Fukunaga | 117599 | 9665 |

25944 7590 08/15/2006

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EXAMINER

LEE, BENNY T

ART UNIT PAPER NUMBER

2817

DATE MAILED: 08/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/692,823

Applicant(s)

FUKUNAGA, TATSUYA

Examiner

Benny Lee

Art Unit

2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2 and 4-6 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 Oct 2003, 11 July & 19 Dec 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>25 July 2006</u> | 6) <input type="checkbox"/> Other: _____ |

This application is in condition for allowance except for the following formal matters:

In the Specification:

The disclosure is objected to because of the following informalities: In paragraph [0047], 9th line therein, and paragraph [0048], second line therein, note that “Figs. 2 and 3” should be rewritten as --Figs. 1 and 2-- for a proper characterization and for consistency with the labeling in the corresponding drawing figures (i.e. reference labels (20, 12) only appear in --Figs. 1 and 2-- rather than “Figs. 2 and 3”). Appropriate correction is required.

In the Drawings:

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the first waveguide having the line shape conductor and ground electrode with the line conductor being short circuited to one of the ground electrodes of the second waveguide must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either

Art Unit: 2817

“Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

In the Claims:

In claim 1, fifth paragraph, first line therein, note that --at least two-- should precede “ground electrodes” for consistency of description; fifth paragraph, third & fourth lines therein, note that “from an upper side or lower side of the stacking direction side” should be deleted as being unnecessary in view of the amendments suggested by the examiner; fifth paragraph, fourth line therein, note that “to one of the ground electrodes” should be rephrased as --to said one of the at least two ground electrodes-- for clarity of description; fifth paragraph, fifth & sixth lines, note that “in a plane containing the connecting window, the one of the ground plane electrodes of the second waveguide having the connecting window” should be deleted as being unnecessary in view of the amendments suggested by the examiner.

In claim 4, lines 1 & 2, note that “regions for electromagnetic wave propagation in” should be deleted as being unnecessary.

In claim 4, line 5, & claim 5, line 1, note that “and” should be rewritten as --the-- at each occurrence for consistency of description.

In claim 5, line 3, note that --the-- should precede “boundary” for consistency of description.

Comments:

With regard to the drawing objection, while Figs. 21A & 21D show the particulars of the TEM waveguide and Fig. 1 depicts in general the first TEM waveguide having an end adjacent

Art Unit: 2817

an end of the ground electrode of the second waveguide, there is no figure which actually depicts the line shape conductor & ground electrode of the first TEM waveguide being "short circuited" at the first end thereof as recited in amended claim 1. Since this feature is considered a critical feature in the understanding of the invention, such a feature should be accordingly depicted in the drawing figures.

With regard to the recitations of "upper side or lower side", the examiner contends that such a limitation would be irrelevant since the location of the "connecting window" has been previously established with respect to a specific ground electrode (e.g. an upper ground electrode or a lower ground electrode) and the ends of the first waveguide must be connected to that ground electrode in which the connecting window has been established.

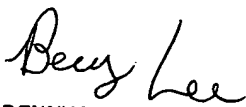
Similarly, with respect to the "connecting window" and the "plane" & "ground electrode" containing the "connecting window", the examiner contends that since the "connecting window" was previously defined as being located in a specific ground electrode, the limitation in question would be redundant since it appears to merely redefine what has previously been defined with respect to the "connecting window".

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Claims 1, 2, 4-6 are allowable over the prior art of record.

Any inquiry concerning this communication should be directed to Benny Lee at telephone number 571 272 1764.


BENNY T. LEE
PRIMARY EXAMINER
ART UNIT 2817